

Amendments to the claims:

This listing of the claims will replace all prior versions and listings of the claims in the application:

Listing of Claims:

1. (Previously Presented) A wireless terminal, comprising:
a short-range communication module that is configured to communicate first information over a short-range wireless interface with a communication device;
a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol; and
a processor that is configured to encode voice in the second information using at least one of an Enhanced Full Rate (EFR) codec and an Adaptive Multi-Rate (AMR) codec for transmission by the cellular transceiver according to a signal processing operation, and is configured to selectively encode voice in the first information using at least one of the EFR codec and the AMR codec for communication by the short-range communication module using the signal processing operation based on whether the communication device supports an enhanced communication mode.
2. (Original) The wireless terminal of Claim 1, wherein the short-range communication module is configured to communicate the first information according to a Bluetooth communication protocol.
3. (Previously Presented) A wireless terminal, comprising:
a Bluetooth module that is configured to communicate first information with a remote Bluetooth device;
a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol; and
a processor that is configured to encode voice in the second information using at least one of an Enhanced Full Rate (EFR) codec and an Adaptive Multi-Rate (AMR) codec for transmission by the cellular transceiver, and to selectively encode voice in the first information using at least one of the EFR codec and the AMR codec for communication by

the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode.

4.-6. (Canceled)

7. (Currently Amended) The wireless terminal of Claim 3, wherein the first information comprises audio information, and wherein the processor is further configured to cancel echo in the audio information for communication by the Bluetooth communication module using a same signal processing operation that is used to cancel echo in audio information in the second information communicated by the cellular transceiver in response to the remote Bluetooth device supporting an enhanced communication mode.

8. (Currently Amended) The wireless terminal of Claim 3, wherein the first information comprises audio information, and wherein the processor is further configured to reduce noise in the audio information for communication by the Bluetooth communication module using a same signal processing operation that is used to cancel echo in audio information in the second information communicated by the cellular transceiver in response to the remote Bluetooth device supporting an enhanced communication mode.

9. (Previously Presented) A wireless terminal, comprising:
a Bluetooth module that is configured to communicate first information with a remote Bluetooth device;
a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol; and
a processor that is configured to convolutionally encode the second information for transmission by the cellular transceiver according to a signal processing operation, and to selectively convolutionally encode the first information according to the signal processing operation for communication by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode.

10. (Previously Presented) A wireless terminal, comprising:

a Bluetooth module that is configured to communicate first information with a remote Bluetooth device;

a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol; and

a processor that is configured to interleave the second information over time for transmission by the cellular transceiver according to a signal processing operation, and to selectively interleave the first information over time according to the signal processing operation for communication by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode.

11. (Cancelled).

12. (Original) The wireless terminal of Claim 3 wherein the remote Bluetooth device comprises a cordless telephone base station that is configured to be connected to a public switched telephone network (PSTN), and wherein the processor is configured to communicate through the Bluetooth module with the cordless telephone base station.

13. (Previously Presented) The wireless terminal of Claim 12, wherein the processor is configured to selectively embed control data in the first information based on whether the remote Bluetooth device supports an enhanced communication mode, and wherein the control data comprises a command to control operation of the cordless telephone base station.

14. (Original) The wireless terminal of Claim 13, wherein the control data instructs the cordless telephone base station to terminate a call on the PSTN.

15. (Previously Presented) A method of operating a wireless terminal, comprising:

determining whether a remote Bluetooth device supports an enhanced communication mode;

selectively encoding voice in first information using at least one of an Enhanced Full Rate (EFR) codec and an Adaptive Multi-Rate (AMR) codec according to a signal processing

operation for communication to the remote Bluetooth device based on whether the remote Bluetooth device supports an enhanced communication mode; and
communicating the first information to the remote Bluetooth device.

16. (Previously Presented) The method of Claim 15, further comprising:
encoding voice in second information using at least one of the EFR codec and the AMR codec according to the signal processing operation for transmission to a cellular network.

17.-18. (Canceled)

19. (Previously Presented) The method of Claim 16, wherein the first information comprises audio information, and further comprising canceling echo in the audio information.

20. (Previously Presented) The method of Claim 16, wherein the first information comprises audio information, and further comprising reducing noise in the audio information.

21. (Previously Presented) A method of operating a wireless terminal,
comprising:
determining whether a remote Bluetooth device supports an enhanced communication mode;
selectively convolutionally coding first information for communication to the remote Bluetooth device based on whether the remote Bluetooth device supports an enhanced communication mode; and
communicating the first information to the remote Bluetooth device.

22. (Previously Presented) A method of operating a wireless terminal,
comprising:
determining whether a remote Bluetooth device supports an enhanced communication mode;

selectively interleaving first information over time for communication to the remote Bluetooth device based on whether the remote Bluetooth device supports an enhanced communication mode; and

communicating the first information to the remote Bluetooth device.

23.-26. (Canceled)

27. (Previously Presented) The wireless terminal of Claim 1, wherein the processor is further configured to convolutionally encode the second information for transmission by the cellular transceiver according to a signal processing operation, and to selectively convolutionally encode the first information according to the signal processing operation for communication by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode.

28. (Previously Presented) The wireless terminal of Claim 1, wherein the processor is further configured to interleave the second information over time for transmission by the cellular transceiver according to a signal processing operation, and to selectively interleave the first information over time according to the signal processing operation for communication by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode.

29. (Previously Presented) The wireless terminal of Claim 1, wherein the processor is further configured to selectively encode the first information by selectively embedding control data in the first information based on whether the remote Bluetooth device supports an enhanced communication mode.